

NEW DESCRIPTIONS

STUDIES ON SOME SPIDERS OF THE GENERA *TEGENARIA* AND *AGELENA* FROM KHASI AND JAINTIA HILLS, INDIA (ARANEAE: AGELENIDAE)¹

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(With thirteen text-figures)

INTRODUCTION

Our information about Indian Agelenids begins only with the recent contribution of Tikader (1962, 1968). Till the present work Indian Agelenid fauna was represented by a few species of *Agelena*, mostly from Khasi and Jaintia Hills area. In the present paper two more species (*Tegenaria shillongensis* and *Agelena oaklandensis*), new to arachnology are described and short report of the known species is also added.

I am grateful to Dr. B. K. Tikader, Deputy Director, Zoological Survey of India, Poona, for confirmation of the identifications.

The type specimens will be deposited in the National Collection of Zoological Survey of India, Calcutta in due course.

1. *Tegenaria shillongensis* sp. nov.

(Figs. 1-7)

General: Moderately large spider, carapace and chelicera dark brown, legs reddish brown, abdomen light grey with white chevron. Total length (♀) 10.20 mm. Carapace 4.50 mm. long, 4.00 mm. wide; abdomen 5.50 mm. long, 5.00 mm. wide.

Cephalothorax: Longer than wide, cephalic region narrow, convex and higher; thorax

broad and almost flat. Both rows of eyes pro-curved, laterals of each side almost contiguous by a ridge. Laterals slightly larger than medians; all on small tubercles, ocular quad wider behind. Carapace dark brown, clothed with short hairs. Clypeal width more than the diameter of eyes. Chelicerae curved, inner margin of fang groove armed with six teeth. Labium 1.5 times longer than broad. Sternum shield shaped pointed behind, in front of coxae IV. Endite and chelicera with scopulae. Legs clothed with long hairs and few spines; tibiae and metatarsi with three pairs of ventral spines.

Abdomen: Oval, light grey with yellowish white chevrons on the dorsum. Ventral lighter with few faint patches. Both surfaces clothed densely with hairs. Spinnerets almost of same colour, anterior pair small, posterior pair long and with two segments. Epigynum paired with a median ridged as in text-fig. 4. Internal genitalia as in text-fig. 5. Male palpus as in text-figs. 6, 7.

Holotype: female, *paratype* 3 females, *allotype* male.

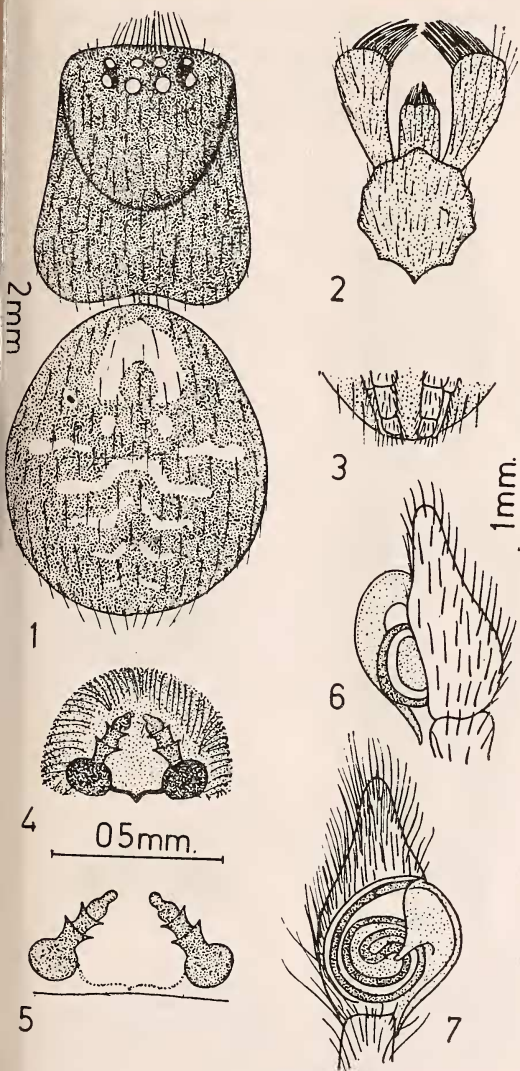
Type-locality: Kenches Trace (inside room), 25.8.1973, other females and male from same locality, 24.10.74. Coll. M. Barman.

Discussion: This species is closer to *Tegenaria lunakensis* Tikader but differs from it in (i) Body colour, (ii) Absence of foveal

¹ Accepted December 1977.

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mark, (iii) Structure of epigynum and male palpus.



Figs. 1-7. *Tegenaria shillongensis* sp. nov.

1. Dorsal view of female, legs omitted; 2. Sternum with maxillae and labium; 3. Ventral view of posterior end of abdomen showing spinners; 4. Epigynum; 5. Internal genitalia; 6. Lateral view of male palpus; 7. Ventral view of male palpus.

These spiders live in funnel web built in the corners of houses or in near by bushes but are common in houses and become active in the night and are found to come out of the webs. They are found from April till November.

2. *Agelena gautami* Tikader

Agelena gautami Tikader, 1962, *J. Linn. Soc., London*, 44(300): 569. Tikader, 1968, *J. Assam Sci. Soc.*, 11: 158.

Specimens examined: 3 females, Shillong, 21.6.1965 and 2 males, 16.7.1969. Coll. *M. Barman*.

Diagnosis: Body elliptical, covered with deep brown hairs, carapace light brown, lateral regions darker, longitudinal foveal line prominent; legs yellowish brown, clothed with long hairs and spines. Abdomen brown, anterior spinnerets separate, posterior spinnerets longer and provided with two segments. Total length (♀) 13.75 mm. Carapace 5.00 mm. long, 4.00 mm. wide; abdomen 9.00 mm. long, 4.10 mm. wide. Both rows of eyes procurved but the posterior row more strongly arched, posterior medians smaller, rest equal in size. Ocular quad almost a square anteriorly slightly narrower.

These spiders live in funnel like web with retreat, commonly they weave their webs in the corners of houses, bathrooms etc., wait for their prey in the opening of funnel and hide in the retreat when disturbed.

Distribution: So far this species is known only from its type locality, i.e. Shillong, Meghalaya, India.

3. *Agelena shillongensis* Tikader

Agelena shillongensis Tikader, 1968, *J. Assam Sci. Soc.*, 11: 158.

Specimens examined: 4 females. Lawsohtun (Khasi Hills), 2 males, Shillong. Coll. *M. Barman*. 28.2.1969 and 10.7.1971 respectively.

Diagnosis : Carapace flat, oval, light brown, the middle of thoracic region with a fovea; laterally broad longitudinal deep brown patches and margins with a thin line, clothed with hairs and few spines. Eyes white, anterior row nearly straight, posterior row slightly procurved, medians nearer to each other than from adjacent lateral. Legs greenish brown, leg III shortest, trichobothrium prominent on leg IV. Abdomen oval, dark brown with light brown design, clothed thickly with greenish hairs. Total length (♀) 10.00 mm. Carapace 4.00 mm. long, 3.10 mm. wide; abdomen 5.20 mm. long, 3.10 mm. wide.

This spider is found in its sheet web with funnel like retreat in the bushes.

Distribution: Laban, Shilong, Lawsohtun (Khasi Hills), Meghalaya, India.

4. *Agelena oaklandensis* sp. nov.

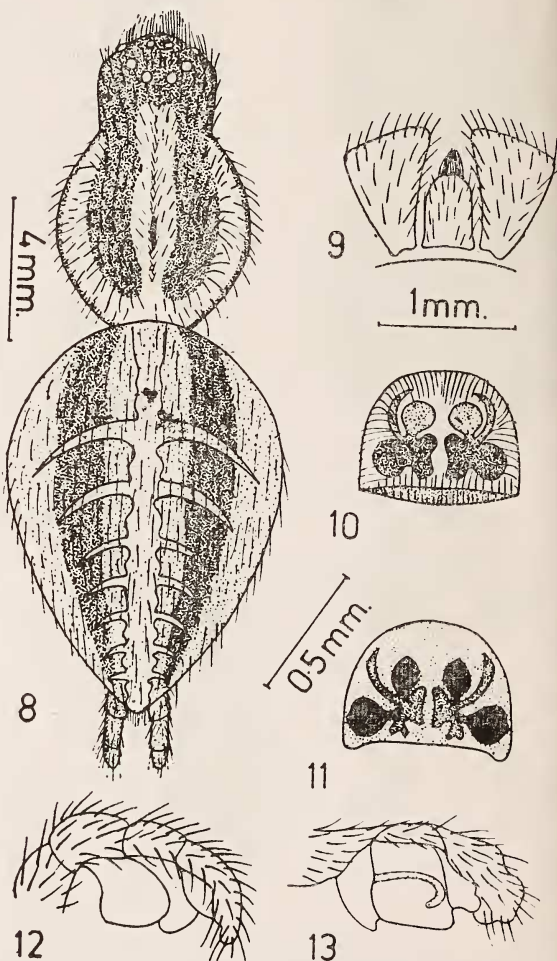
(Figs. 8-13)

General : Large spiders, cephalothorax brown, legs yellowish with brown bands. Total length (♀) 19.00 mm. Carapace 8.00 mm. long, 5.50 mm. wide; abdomen 11.00 mm. long and 8.00 mm. wide.

Cephalothorax : Cephalic region narrower, higher and convex, thoracic region flat, fovea in the centre. Carapace dark brown in the cephalic region and from there a broad longitudinal patch extends on each side upto posterior end of carapace as in text-fig. 8; the area in between the patches and the outer lateral margins light brown. All eyes white, anterior medians larger, rest almost equal. Anterior row of eyes straight, posterior row strongly procurved; laterals nearer to each other. Ocular quad longer than wide and narrower in front as in text-fig. 8. Clypeus high and vertical. Chelicerae strong, inner margin with four teeth and outer with five teeth; fang unarmed. Sternum heart shaped, pointed behind, clothed with long spiny hairs and

scattered spines. Legs light brown with deep brown bands prominent near the ends of segments.

Abdomen : Oval, dark brown to grey, in the mid-dorsal region a longitudinal light brown line from which a number of oblique narrow lines laterals. Sub-lateral regions dar-



Figs. 8-13. *Agelena oaklandensis* sp. nov. 8. Dorsal view of female, legs omitted; 9. Maxillae and labium; 10. Epigynum; 11. Internal genitalia; 12. Lateral view of male palpus; 13. Ventral view of male palpus.

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ker longitudinally. Dorsum clothed with prominent hairs. Venter light brown. Anterior spinnerets separate, longer and two segmented. Epigyne as in text-fig. 10. Internal genitalia as in text-fig. 11. Male slender and much smaller; carapace light brown and abdomen lighter and lines not prominent. Male palpus as in text-figs. 12, 13.

Holotype : female *allotype* male.

Type-locality : Oakland, Shillong, India. Coll. M. Barman, 22.7.1972.

Discussion : This species resembles *Agelena shillongensis* Tikader in general appearance but differs from it in (i) Abdominal colour,

(ii) Anterior median eyes larger than others, whereas in *A. shillongensis* anterior median eyes smaller than others. (iii) Structure of epigyne and male palpus different.

These spiders are commonly found from May onward. They spin funnel like web on bushes usually in the hedges of Duranta, with tube like retreat. During the day they wait near the opening of the retreat and hide very quickly when alarmed. When approached sometimes withdraw their legs and fall down like pebbles to safety. Egg cases are found in July and August, and is cared for by the mother.

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CHOEROSPONDIAS AURICULATA (ANACARDIACEAE) — A NEW SPECIES FROM INDIA¹

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(With a text-figure)

During the revision of the genera *Pistacia* L. and *Choerospondias* B. L. Burt, I came across some specimens which needed re-examination of identification. A few of such specimens collected by P. W. Mackinnon, and pre-

viously identified as *Pistacia integerrima* Steuart. On careful examinations it proved to be different from *Pistacia* L. Its characters indicate an undescribed species of *Choerospondias* B. L. Burt.

The genus *Choerospondias* B. L. Burt was till recently known to be represented in India by only one species, *C. axillaris* (Roxb.) B.

¹ Accepted January 1978.

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